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ABSTRACT

A study investigated whether the use of reading games would result in greater improvement in the reading skills scores of a sample of fourth grade students as compared to a control sample taught by a traditional basal method of instruction. The subjects, 20 heterogeneously grouped students (10 for the experimental group and 10 for the control group) in a lower middle class urban school who were reading on the fourth grade level, were administered the comprehension section of the MacMillan Achievement Test in order to determine their reading weaknesses. After an 8-week instruction period, a posttest was given to determine how much growth had occurred during the period of the experimental treatment. Results indicated that the children in the experimental sample showed greater improvement in reading ability than the control sample, although the difference between the means of the two samples was not statistically significant. (Two tables of data are included, and 22 pages of a literature review, 27 references, and 3 appendixes, showing test results and gain in raw scores, as well as as a description of reading skills games, are attached.) (JK)

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The Effect of Reading Games on the Improvement of 4th Grade Reading Skills Scores

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by

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Abstract

The purpose of this study was to find out whether or not the use of reading games would cause greater improvement in the reading skills scores of a sample of fourth grade students as compared to a control sample taught by a traditional basal method of instruction. The subjects were twenty heterogeneously grouped students who were reading on the fourth grade level. The sample in the study attended a lower middle class urban school. The experimental sample consisted of ten students and the control sample consisted of ten students also.

Instruction took place for eight weeks during thirty minutes of the reading period for each sample. The results of the post-test demonstrated that the students in the experimental sample made greater improvement in their reading ability on the Mac Millan Reading Achievement Test, (Grade 4 - Level 19 - 24) than the control sample though the mean differences between the samples was not statistically significant.

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Introduction

McCormick (1981) found that skill games get the attention of elementary students better than worksheets, drills, or assignments such as "work all the exercises at the end of the chapter". Similarly, Canny (1978) found that the gaming approach used to reinforce reading skills was an effective means to help students progress toward independence in reinforcing their individual reading skills using skill card decks of tasks on a commercial gameboard.

The gaming approach has been proposed as one technique for teaching specific reading skills. Gaming is a useful tool only in the hands of teachers, who are selective in using games for reinforcement of skills was reported by Allington, (1977). Reading games can bring variety in learning into the classroom (Rakes, 1982) found that reading games have many uses to reinforce earlier or existing taught skills, to improve social interaction among students, to provide times for pupils self-directed learning in the classroom.

But it has been shown instruction in reading skills should be connected to the whole process of reading in order to be effective. Twenty-six fourth graders in Jefferson County, Kentucky assumed the responsibility of constructing their own learning materials and skill games of reading skills that they needed improvement and mastery in. In February of 1978 these fourth graders were given The Weekly Reader Skills Inventory to test their achievement on

reading skills. At that time more than half of them were weak in more than four or more skills. After the testing they were put into groups of fours in skill categories that they had tested well in to design and construct the twelve activities and games to improve that skill. Each of the students worked on their skill project weekly for one period for three months. At the end of the three months they were given the same Weekly Readers Skills Inventory and half of the twenty-six students showed no deficiency in any of the skills tested, these findings were reported in a study by Mc Knight (1978). Hence McKnight (1978) concluded that learning materials and games created and constructed by students will motivate them toward mastery of reading skills. Likewise, McCormick (1981) suggests that teacher constructed skill games, too can be designed to fit the specific needs of individual students.

The use of reading games in the classroom are many. The following are a few examples: to enhance learning to supply correction, reinforcement and equal competition as reported by Andrews (1977) found reading games contribute to students failure and self esteem if, they are not supervised by teachers to reinforce earlier skills.

Rakes (1982) reported that educational games are useful tools in the classroom if the teacher takes responsibility of being selective as to the type of games. Based on the foregoing reports in the literature it would be a worth-

while activity for a teacher to design an approach using games appear to get students' attention, to motivate and to reinforce the reading skills in intermediate grades because many children in these grades have problems with reading comprehension skills. The problem would be to determine whether or not fourth graders, in particular, who have been exposed to the gaming approach as a technique to reinforce reading, would make more progress with specific reading skills than students taught by a traditional basal method.

Hypothesis

To determine whether such an approach would be worthwhile, the following study was established. It is hypothesized that children who have been exposed to gaming as a technique to reinforce reading skills, will not achieve higher scores on a skill test than a control group taught by a traditional basal method.

Definition of Terms

The gaming approach is an approach used to reinforce reading skills where pupils are assigned card decks containing a specific reading skills tasks that they need to practice, a reading game or instructional game is any activity that follows rules, helps students learn a skill, involves competition and results in a winner, while board games, which are played using a gameboard on which most of the action occurs.

Procedures

A series of ten reading games to use along with the gaming approach were developed to reinforce and to improve the reading skills of fourth graders. The games were developed in the areas of vocabulary, sequence, and main idea which were correlated with Rhymes and Reasons level-four of the MacMillan Reading Series.

Sample

The population in this study consisted of twenty nine and ten year old children enrolled in the fourth grade at Maple Avenue School in Newark, New Jersey. The students were homogeneously grouped in reading and were reading on a fourth grade level in the class. The children were from lower middle class families as determined by the free lunch application form. The control sample was composed of ten randomly chosen students, who followed the traditional method of instruction. The experimental sample was composed of ten randomly chosen students, who used the ten reading games designed to correlate with Rhymes and Reasons text in the MacMillan reading series.

Setting

As noted earlier subjects in this study attended Maple Avenue School in Newark, New Jersey. The school is located in the Weequahic section of the city. The school building

consists of three floors. Grades four through eight are housed in this building. Also, in the school there are three special education classes consisting mostly of black students with only a low percentage of Spanish.

Materials and Procedures

The twenty children were administered the comprehension section of the MacMillan Achievement Test, (Grade 4-Levels 19-24) consisting of forty-six test items in November of the 1987 school year. The pre-test was given to determine the reading weaknesses of the students in the writer's study.

Both the control and the experimental sample were given the Comprehension test during time ordinarily used for reading. In the morning period the test was timed and took thirty minutes to complete.

A post-test administered after eight weeks in January 1988 to determine what growth occurred during the period of the experiment treatment method of instruction.

The experimental treatment sample received regular basal reading instruction as a group. Afterward, for thirty minutes, they played one of the ten reading games using the gaming approach to practice the reading skill which had been taught in the group lesson. The reading skills were numbered and put on decks of cards and placed in large brown envelopes with directions. Each envelope had the

name of the skill such as main idea or sequence on the cover.

The games were played daily for thirty minutes during the reading period or when pupils had completed assignments in the afternoon. When the children completed a skill card in a game setting, the teacher or an assigned peer checked the child's work. The completed skill card was then given to the teacher for her evaluation of the skill's mastery for each student. The control sample received regular basal reading instruction for the same amount of time, and for thirty minutes daily, worked on the same reading skill as the experimental sample using worksheets, workbooks or dittos.

Results

Table I illustrates the findings of the pretest administered to both control and experimental samples.

Table I

Pretest: Means, Standard Deviations and t-values of the MacMillan Comprehension Section of Reading Achievement Test.

Sample	N	Mean	S D	t	Sig
Experimental	10	68.9	19.11		
Control	10	65.00	18.95	.52	NS

18 D F

As can be seen the mean for the ten students in the experimental sample on the pre-test was 68.9 and the mean for the ten students in the control sample was 65.00. The t for the different pretest means on the Comprehension Section of The MacMillan Achievement Test, the differences between the two groups were derived. A t-value of .52 was computed which illustrates that the differences between the means of the samples were not significant. This suggests that at the beginning of this experiment both groups were at relatively the same level in their reading comprehension skills.

Table II illustrates the findings of the Post-test administered to the control and experimental samples. As can be seen,

Table II

Post-test: Means, Standard Deviations and t-valves of the MacMillan Comprehension Section of Reading Achievement Test.

Samples	N	Mean	SD	t	Sig
Experimental	10	93.2	6.94	1.36	NS
Control	10	83.7	3.07		

The mean for the ten students in the experimental sample on the post-test was 93.2 and the mean for the ten students in the control sample was 83.7. The table indicated that both groups performed similarly despite the difference in teaching method. The t-value of 1.36 indicates that the difference in progress between the two samples was not statistically significant.

The experimental sample had a greater mean on both the comprehension pre-and post-tests than the control sample. While the mean gain was greater for the ten students in the experimental sample than for the ten students in the control sample, the t of 1.36 for the difference between the means was not significant. During the experiment the control sample's mean gain was 18 points, while the experimental sample's mean gain was 25 points.

CONCLUSIONS

The data were analyzed and conclusions were drawn regarding the effectiveness of the gaming approach as a technique to reinforce reading skills. It was concluded that the gaming approach was a useful technique in reinforcing and improving the reading abilities and reading scores of pupils on the comprehension section of the MacMillan Reading Achievement Test. Data indicated there was no significant difference between the means of the two samples. The hypothesis that the use of games to supplement

instruction would improve achievement significantly was rejected. However, the results show a positive trend in that the mean of the experimental sample was greater and thus is suggestive of the value games may have in instruction. According to the research of Rakes, (1982), who found that reading games can bring variety and learning into the classroom; games can be used to reinforce prior skills, to improve social interaction among students, and to provide independent learning in the classroom. While Allington (1977) found that gaming is a useful tool only in the hands of teachers who are selective in using games for reinforcement of skills.

It was concluded that students who were in the experimental sample had a higher mean growth than that of the control sample. This would seem to indicate some value in the gaming as a technique to teach reading skills.

Implications for Future Research and For Teaching

Reading games are valuable and useful tools of instruction because they can help to motivate students, to be eager about learning, hold their attention and involve active participation. The research of Simpson (1976) indicated that games are powerful tools for learning if they are selected to teach specific skills and practice is

given in small groups. These games motivate children to become better readers.

The slow pupils learned from social interaction in a group setting learning reading skills from brighter peers using the gaming approach. Grabowski (1975) found, in a game that he designed for slow and good readers called "The Reading Bingo", that slow readers improved their reading skills, gained self-esteem, and gained mastery with new and review words. He concluded that games were useful tools for the good readers to help the slow reader to gain mastery.

Abstract learning becomes more relevant and meaningful to slow learners when a game format is used. This implication is shown in the research of Blankenbaker (1976) that pupils who have problems with comprehending abstract symbols and concepts that are taught using routine pencil and paper can learn the same concepts more enthusiastically when taught using the gaming approach.

Future Research

There is enough evidence to suggest that the study should be replicated over a longer period of time for more conclusive results. Children of a more diversified group could be used in such a study, employing more standardized measuring instruments. The research of the gaming method needs to be more thorough, continued, and implemented in all reading classroom to give variety to the teaching of

reading skills. The gaming method and its usefulness as a teaching tool should be presented to other educators in an in service workshop. From the research on the use of games in the reading classroom, I would suggest more studies be performed in this area of gaming using it as a method to teach reading comprehension skills.

Reading Games and Improvement of Reading: Related Literature

Georges (1984) conducted a study at Kean College of New Jersey to determine if the use of reading games or activities would cause greater improvement in the reading improvement in the reading achievement scores of third grade low-achieving students in an urban school in Newark than would traditional instructional methods. The control group consists of five students from Mrs. K's third grade class who were following the traditional method of instruction. The experimental group consisted of seven students from the writer's class who used the thirty reading games on the skills of vocabulary, sequence, and main idea games designed to correlate with the "Magic Times" text in the MacMillan reading series. The Metropolitan Achievement Tests were used for both for the pretest and the post-test using the comprehension section. The results from this study indicated that the children in the experimental group scored higher on the test than did the control group pupils. The difference between the means of the two groups, however, was not statistically significant. The reading games activities were used from November, 1979 and were completed by the experimental group by the end of January, 1984.

Some implications for future research and for teaching were:

1. Learning games are important motivating teaching aids for students.

2. They are useful to teach and reinforce skills previous taught.
3. When participating in a gaming situation, children are usually enthusiastic, attentive, and very active about
   the learning.
4. Slow students usually show skill growth by using reading games.
5. There are positive social interaction among slow and good readers in a gaming situation.
6. Primary level children's reading material become more relevant and meaningful when they play reading games to practice their skills.
7. Future researchers should use average readers and they should be from rural, suburban or exurban areas.

Clegg (1973) presented to The American Education Research Association Annual Convention in New Orleans a study on The Effectiveness of Learning Games Used by Economically Disadvantaged Parents To Increase The Reading Achievement of Their Children. In this study he examined the effectiveness of individually planned learning games used by low-income parents to increase the reading achievement of their children. The subjects used were 30 children, who were enrolled in second grade classes in Seattle's Central area. Twenty children were randomly selected and

assigned to two groups in classroom-A. Ten children were chosen from classroom-B to be in the External Control Group. The Experimental group were taught skills at school plus they were taught eight different learning games for eight weeks at home. Games were chosen as a method because they get the attention of the students and get them actively involved. The games used in this study focused on many reading skills such as attending, recognizing words, rhyming, sentence creation, expression in oral reading, and comprehension skills. Eight learning games were selected from the results of inventory tests showing the children's reading skill needs; the major conclusions and findings were:

1. Students who had participated with learning games with their parents achieved scores that were significantly higher than those of the control group in vocabulary, composite reading, and IQ, and
2. highly significant positive correlations ever found for post-vocabulary and composite reading with post -IQ scores.
3. Learning games appeared to offer useful tools for learning.
4. By low-income parents using learning games to teach their children, they increased their reading achievement.
5. The children's IQ performance improved.

6. Parents became active helpers in the learning process.

Significant results were found relating the learning games and reading comprehension; this may indicate either insufficient time for the games or inadequate content. Further research is still needed in using parents as teachers of their own children. Also, educators should find the results from the study very useful to help with mastery by pupils in specific reading skills, and also with other subject areas.

Blankenbaker (1976) found in an experiment with students that children have problems with comprehending abstract symbols and concepts that are taught using routine pencil and paper. However, if these same concepts are introduced to them using learning activities in a gaming format they are more enthusiastic. The criteria that he suggested to the educator when purchasing or improving equipment for classroom games were:

1. The children's development should be taken into consideration when choosing games. They must offer at least one educational goal.
2 Games should be attractive, challenging and motivating to the children.
3 Chances should be offered in games because this give children opportunities to use creative plays which add to the pupil's enjoyment.

4. Games should be safe for the children.

Some of the games developed here promoted physical and social growth in children by helping them to discriminate left -right, color shapes and use eye-hand coordination reported Blankenbaker (1976).

Shriloff (1980) found some reading games and activities that she based on a baseball theme. These games were used with her upper - grade reading students. The games and activities were set up to help her students with letters, and symbols in words. At the end of the semester the students' growth with baseball cards were significantly. They, also had fun doing this experiment with a baseball theme. The students' interest was high when the following reading skills activities were implemented. They are as follows:

1. Library skills - were taught by the students researching the history of the game. They used the table of contents to preview a book.
2. The organizing skills were introduced to the students by making chronological outlines on the history of baseball.
3. The students wrote many kinds of paragraphs.
4. Sequencing was taught to the students by arranging subheadings and sentences of given event into a logical order.

5. Visual skills were taught to pupils by them writing different dialogues to fit a given cartoon type balloon.
6. The skills of listening comprehension were taught to students by drawing pictures on baseballs. Students were then to follow the given direction on the baseball cards.
7. Vocabulary skills were reinforced by teaching students to use multiple meaning of words such as fans, games, and pitcher correctly.
8. Also, vocabulary bingo, baseball, and flash cards were used to expand their baseball vocabulary.
9. Word Analysis skills were demonstrated by using a variety of phonetic reading skills as finding blends, double vowels, and syllables.
10. Context clues were taught using a close activity where every fifth word, except proper nouns were left out.
11. Children were instructed to find main ideas in given selections by underlining the sentence that stated the main idea.
12. Children were to identify, if a statement was a fact or an opinion. These games and activities made a great correlation of, the sport baseball with the improvement of specific reading skills reported Skrailoff (1980).

Suhor (1975) reported that "the fun hypothesis" is very popular in most professional literature on the value of games in the classroom. He suggested some guidelines for educators in using games, in the classroom which are as follows:

1. Games should be used in the classroom to teach both in the cognitive and affective areas of students' personalities.
2. Games should be used to teach or to reinforce some learning skills that have been studied.
3. Games do not always involve competition.
4. Educators should use a gaming method, if possible when teaching a concept or a skill over using a non-gaming method.
5. Use variety when you are teaching a gaming reading skill to pupils is very important.
6. The educator must have good classroom management, and good rapport with students when implementing the gaming approach.

Criscuolo (1980) reported on a study in which twenty-eight classroom-tested games which will improve the reading comprehension of children. He stated that there is more importance today on children's phonics and the pronunciation of isolated words and not enough importance on improving comprehension. Of the 28 classroom tested

activities in this article to help pupils' reading comprehension the following are examples:

1. Story rolls - teach students to identify and list the main events in a sequence and then to draw the main events on paper.
2. "Hold up the Card" game teaches a student to write a descriptive sentence about the character in a given story.
3. Story line game reinforces pupils' sequence skills and help their summarizing abilities using headings such as scene, characters, location and action.
4. Swap shop - is a game where pupil write descriptive on a character in the text. Then, they swap sentences to identify the character named.

Shankman (1968) found that games can be used to reinforce many reading skills in many interesting ways with vocabulary, phonics, and sight words. After visiting many classrooms she found that games have certain characteristics which students liked. They are as follows:

1. Games that contain clear and simple directions required less teacher supervision.
2. Games can be amusement to pupils and give them a sense of contentment.
3 Games were great motivation to children's positive self-images and assurance.

4. Pupils' honesty and effort are more important than was the fast achievement of a skill
5. Games' test a student's mastery, if the child is competing with himself to improve his progress.
6. Team games can be used to help older students cooperate better among themselves.
7. Psychological drives in students can be stimulated by participating in action games that add variety to learning. Hence, formal teaching was reinforced while learning was made simple with games.

Shankman also reported on the important characteristics of games that are used in the classroom. They are as follows:

1. Games should have value in reinforcing or teaching a reading skill.
2. The fun of the game should be in the reading skill to be taught, rather than in just the playing of the game.
3. Games should have a specific objective that is positive to the child, but reinforces or enriches a classroom aim.
4. Games should be easy to check so that a child maybe the leader.
5. Games should be geared to meeting students' interests, abilities and needs.

6. Good sportsmanship can be stimulated by playing reading games.
7. A teacher will understand her pupils' needs better by participating along with them in gaming situations.

On the other hand, Shankman found that games do have limitations, because they can be used as only busy work, or just play activity. But, the wise teacher should adapt games to fit the needs of her students.

Shankman (1978) reported on some games and activities that can be used with primary children to give them practice in reinforcing comprehension skills. She indicated that the teacher should:

1. Begin by giving children simple oral directions of daily routines, and reading, and interpreting of pictures.
2. Then, ask students to give directions from the classroom to the office and back again.
3. Use simple recipes, children can see the relationship between the words and their meanings.
4. Have children note the order of events in a given story.
5. Have children draw pictures to note sequence in a given story. This were noticed as a very useful procedure.

6. Have children practice putting comics into correct sequence as this is very helpful in learning sequencing.
7. Have children act out given statements on cards in a gaming situation.

She also found that in order for primary students to do critical reading, they can use games and activities to practice critical reading. Some cautions she notes were that:

1. The children should be familiar with the vocabulary from their earlier experiences.
2. They must know more than the facts given in the selection.
3. They should have an understanding of the words and an application of their uses from the selection.
4. Teachers must guide children in making judgments or the drawing of conclusions on the selection.
5. Children can act out the harder words in order to get clearer meanings when practicing the skill of critical reading.

Synder (1981) reported on a study which he conducted with senior reading majors in "The Material of Reading Instruction Class" at a British Columbia University. They evaluated reading games and their construction. The seniors were to present the games' criteria and results of the verification activities at a teacher reading conference.

The criteria guidelines used in the construction of the games were to: (a) follow the specific directions in making the games to reinforce reading skills, (b) learners-teacher verify the games with observers writing down reactions, and (c) present the guideline, games and results of the verification activities at the reading conference. They were invited to the college to be used in the experiment with the reading games in small groups. The results of the findings in this study were as following:

1. Children's interest in playing the games were improved over the language learning.
2. Games were changed to reinforce specific needs and interest of the children.
3. Each game used a vocabulary ranging from easy to hard.
4. Children were actively involved in helping make the games.
5. The teacher - made games were useful, but the commercial, games were sometimes less expensive.
6. By teaching the games in small group settings the social interactions among the group could be seen as effective by the teacher.
7. Children following rules improved, however, slow readers had problems with reading directions, these were revised and simplified.

8. Games were easily monitored and the skill mastery were easily denoted too.

The implications for educators of this study were that the seniors had some apprehension about giving the presentations to the experience educators; but the students' well planned presentations, displays descriptions and handouts on the games sparked high interest with the educators. Some of the seniors were even offered interviews for teaching positions. Finally, the seniors learned that reading games do have useful places in the school's classrooms, but "the greatest game in town" is still book reading.

Parents can help their children enhance their reading skills by using the games approach. If the parents use patience and positive emotions in the relationship, the activity of gaming will enhance their children's reading skills according to Schubert (1959). Similarly, Kaye (1984) in her more recent book "Games for Reading" reported how parents could use her listing of games to play with their children during their daily activities to help beginner reader to read and to like to read using reading games.

Another researcher, Sherman (1978), found that educational games can be used to reinforce reading skills by creating games on file folders. However, he stressed that each reading game teach a specific reading skill and that the students should be aware of the fact that the game is a means to an end and not an end in itself. In his college

method course he helped his students to develop file folders of reading games that could be used in the elementary grades. In turn the college students guided the children in making their own file folders, because this proved to be an effective motivation strategy. They made games using popular characters taken from basal, children's books, or television characters such as Bionic Woman or Star Trek. The college students were taught five basic rules in using educational reading games in the classroom. In the classroom they were to teach the children the concept that all games have rules. The first rule was that the teacher should play the boardgames with her students in order to balance the competition. The second rule was that the teacher should vary the rules from easy to hard according to the ability of the students playing. Thirdly, the children should be very familiar with content of each game so that they will know when a skill have been mastered. Fourthly, children should not be pushed beyond their frustration level when playing a game.

Finally the teacher must vary the rules of the games to accommodate the reading ability of the group, so that the learning and interest goals of the game will be achieved. Similarly, Schubert (1959) reported that reading games have great value and worth in the class, but must be used by an alert teacher, who has geared the game's goal to the students' needs, abilities and interest.

Thompson (1973) dedicated a chapter in his book Energizers for Reading Instruction to improving the vocabularies of students. In his book he offered a diverse inventory of word games that will improve the vocabularies of students. In it he also advised the use of two modifications of the traditional game of Bingo. Thompson informs us that the book was very good in arousing students participation and interest. However, there were no empirical data supplied to indicate how effective the game was in improving the reading skills of the students involved. This may be attributable to the possibility that there were no system of evaluation used to determine its efficacy. Also, Thompson (1973) reported that word games meet the criterion of reducing the amount of time the teacher spends instructing, as well as pretending the scope of instruction to larger bodies of students.

Another researcher, Gohring (1981) reported on a word game that utilizes current technology and is published by Texas Instruments. It is called Speak and Spell. This game utilized one of the first and foremost portable computer systems for learning purposes. A key pad is on the front of the case and contains the alphabet in its normal sequence. The keys for the five vowels are circled. There is a small speaker which emits a voice and various other computer produced sounds. There are several games available through this computer. The most basic one is a spelling game.

Playing this game the user is presented with ten pronounced words. The player then attempts to correctly spells the words on the key board. If correct, the computer will respond positively; if incorrect, then negatively.

The student receives a second opportunity to spell the word correctly. If he fails again, the word is correctly spelled out on the screen. There are also three other functions built into the computer that allow for other games. One such game is Hangman, the computer chooses a word at random and specifies the number of letters. The player then tries to guess the letters by striking the right keys . If the words is found in less than seven tries, the player wins. If a "clue" is hit in the process, the computer will give one of the letters in the word, but the clue counts for two wrong guesses. Another function of the computer is playing of games is to use a "Secret Code" button. When touched again all the letters are transformed back to the original word. This allows code messages to be transmitted from one user to another.

Beside computer games, though, there are also basic games that do not require operation of a computer. These games are quite numerous and can be used to instruct students throughout the elementary grades. One of the most important things about reading is understanding meaning. Kaye (1984) reported in her book on a game to improve vocabulary called "Frumdidle". A frumdidle is a secret

object, a plant, or an animal. One person thinks of a frumdidle while the other must think of it. Clues are presented to a guesser. Eventually the presenter gives obscurer games clues. This helps the student develop the ability to accurately interpret and make connections. Finally, Austin (1961) reported in her book Reading Evaluation Appraisal Techniques for School and Classroom that teachers have found that games provide variety and interest in reinforcing needed reading skills, differentiating from traditional workbook materials in reading. She noted that format and appeal for teaching reading skills make the elementary child eager to participate in gaming activities.

Canney (1974) reported in an article how reading games can be integrate into the curriculum or placed in lesson plans to supplement or reinforce learning skills earlier introduced. These activities must be challenging to the students. Some of these games may be used in learning centers. Popular commercial gaming board games can be used to teaching the reading skills. The gaming approach is used in each learning center to teach the reading skill. The gaming approach consist of before taking a turn, the student is required to read a word, identify a suffix, match homonym pairs, spell a word punctate a sentence, answer a question and so on. The games can be used once or twice a week for as long as an hour with pupils at all

reading levels. If properly sequenced, and evaluated the gaming approach will motivate pupils to practice reading skills considered by average and low readers to be dull and senseless. The children are to practice the reading skills using gaming board until they become automatic and the students will see the fruit of his effort. Commercial game board used wisely will help children in learning of reading skills. Activity cards are useful cards that can be used in the reading classroom in both individual and group instruction to reinforce and to practice reading skills. Most skills cards can be geared to the students' interest in any subject areas for reviewing and reteaching of concepts already studied. The goal of skills cards is for the individual child or group to develop good work habits. Finally, students are to accept the responsibility of mastery of the skills being taught as reported in Instructor October, (1974).

Listening games along with the illustrative game teaching activities for primary pupils helped them to become listeners turned speakers. These games were created for the pupils to listen for specific purposes such as to detect sequence and then to give an oral response by showing their answers using manipulative device reported Smith (1974).

The colorful games she used showed the students' knowledge of colors and color names, numerals, basic

reading readiness skills, and certain concepts on direction. Also, pupils in small groups guided by the teacher or an older person at a learning center study pupils' reposed in order to recognize specific skills needs such as sequencing, inferencing detailing for directions.

Grabowski (1975) designed a game for slow readers and very excellent readers called "The Reading Bingo." The slow readers were to improve their reading skills in order to gain self esteem, and to gain mastery with new and review words. On the other hand, the excellent readers were challenged to improve their vocabularies by using new words or phrases to which they give meaning and pronunciation. The game was played on bingo cards similar to regular bingo, but on which new, review words or phrases were used. The "caller" picks out a word card from shoe box, reads it to the players, uses the word in a sentence, and places it on the table, face up. However, the very good readers-"caller", is required to say the word and tell its meaning. Players cover each word as they recognize it on the bingo card. When a player have covered four words, either down, across or diagonally, he says "bingo." The goal of the game is for both the slow and the excellent readers to be fascinated by the game. They are to have a small amount of frustration when playing with words to develop their vocabularies.

Simpson (1976) indicated that games are powerful tools for learning if they are selected to teach specific skills and practice is given in small groups. These games motivate children to become better readers. Open game frames can be used to teach and practice any chosen skill at any grade level using the game frame. Students that need practice with the same skill should be placed in the same skill group. When pupils have demonstrated a 70% understanding of a skill, they are now ready to start reinforcing the skill in a gaming situation without teacher supervision. Students that have more than 30 percent error will become frustrated during the game. The goal is for each student to see himself as a winner.

McWhorter (1977) created a booklet for elementary students in her class to take home and use during the summer. The booklet was entitled: "Hip Pocket Reading Games", it was written by two classroom teacher for parents to use with their children. It was to help them reinforce their children reading skills during the summer vacation. She wrote the book because all children need some type of help with reading at home. The teachers designed the reading readiness skills for kindergarten and first grade students. Then, for the first and second graders, activities were put in to reinforce skills that the children had learned during the regular school term. Comprehension

skills were put in for intermediate grade students. Examples of these are noted as follows:

1. Many are the skills of distinguishing likenesses among pictures and objects. Examples of games using these skills were "Treasure Hunt" and "Concentration"
2. "Letter of a Day" "Alphabet food", "alphabet" and "Concentration" were games used to teach students the letters of the alphabet.
3. To teach letter sounds, games such as "Consonant pairs", "Tick-tack-toe' and I'm going to Mexico were used.
4. Comprehension games used to teach children to understand what they were reading are "Oh! What characters" "What was the setting?" and "I am Thinking"
5. "Call them", "Nouns, Describe it" and "Lacing Cards" were used to teach vocabulary.
6. Finally, traveling games included "Musical Vowels", Word Pairs "I'm Going to Mary's".

Summary

In sum, the research indicate that reading games are valuable and useful tools of instruction because they can help to motivate students, to be eager about learning, hold their attention and involve active participation. The game provide an enjoyable change of pace from the traditional

methods of instruction and is effective in promoting retention of reading skills studied earlier. The slow pupil learned from social interaction in a group setting, learning reading skills from brighter peers using the gaming approach. The pupils made statistically significant growth and improvement in their reading achievement scores after participating in a gaming situation both the slow, and brighter readers. Games was an effective means to help students learn reading skills to mastery.

On the other hand, the negative point in the research was that if the teacher using the gaming approach was not very selective of the games used or did not emphasize the instructional value of the games to reinforce a reading skills then this method would not make a difference. The research seems to point to the teacher as being the key to implementing the gaming method wisely to reinforce reading skills.

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APPENDICES

Appendix A

Results of the Pre and Post Testing MacMillan Reading Achievement Test (Grade 4, Levels 19 - 24)

Experimental Subjects	Pre-Test	Post-Test
2.	85	100
4.	78	100
6.	72	100
8.	43	80
10	72	98
12.	76	96
14.	61	93
16.	63	89
18.	87	91
20.	52	85

Control Subjects	Pre-Test	Post-Test
1.	78	89
2.	89	100
3.	87	91
4.	76	96
5.	46	59
6.	41	67
7.	70	89
8.	67	89
9.	35	83
10.	61	74

Appendix B

Gain in raw score for Pre and Post Tests of MacMillan Reading Achievement Test (Grade 4, Levels 19 - 24)

Experimental Sample

Subjects	Pre	Post	Gain
2.	85	100	+15
4.	78	100	+22
6.	72	100	+28
8.	42	80	+37
10.	72	98	+26
12.	76	96	+20
14.	61	93	+32
16.	63	89	+26
18.	87	91	+4
20.	52	85	+33

Control Sample

Subjects	Pre	Post	Gain
1.	78	89	+11
2.	89	100	+11
3.	87	91	+4
4.	76	96	+10
5.	46	59	+13
6.	41	67	+26
7.	70	89	+19
8.	67	89	+22
9.	35	83	+48
10.	61	74	+13

Appendix C

Description of Reading Skills Games

General Objectives:

1. Each player speaks in complete sentences.
2. Follow directions, simple to complex.
3. Attend to tasks on skill cards.

Vocabulary Games:

Game 1: The Tuesday Elephant (Gameboard-two players at a time)

1. Help Tuesday Elephant find his friend Kwani.
2. Words cards are face down in the center of the table.
3. The first player picks up a card and reads the word or phrase on it.
4. If, he knows it, he may keep it.
5. If not he puts it back.
6. The next player may take the card or another.
7. Continue until words are all gone and Tuesday Elephant have found his friend Kwani.

Game 2: Secrets (Gameboard)

1. To find the secrets you must read Cardano's secret cards.
2. Read the words and use them in sentences along the gameboard as clues.
3. You now have found Caradano's secrets.

Game 3: All Stories are Anansi's

1. Help Anansi own all the stories.
2. Pronounce the words on the spiders, hornets, python and the leopards.
3. Use each word in a sentence.
4. Help Anansi own them by matching the words to the correct ways Anansi captured each of the animals.
5. Read each of your answers.
6. You have helped Anansi become the owner of all the stories.

Main Idea Games:

Game 4: Nate's Deck of Cards

1. Read each sentence on each card.
2. Find the cards that do not belong to the story.

3. Show them to your peers.

Game 5: The Lizard

1. Read the sentence on each of the lizards carefully.
2. Find the lizard that does not belong to the content of this poem.
3. Give it to your leader in the group to check.

Game 6: Ladder Game

1. Read each sentence on each of the steps of the ladder.
2. There are ten steps with ten different sentences.
3. Follow the directions on your sentence cards and take out the ones that do not belong.
4. Did you reach the top of the ladder and have found the main idea?

Sequence Games:

Game 7: Erica the Inventor

1. Read the story.
2. Think about your story.
3. Use the numbers to help you put the sentences in order.
4. Now, you have found out Erica's invention.
5. Read it to a peer in the group.

Game 8: The Card Houses

1. How many different kinds of card houses did Dina create?
2. Read the sentences.
3. Cut the sentences stripes out and paste them in the right order on the gameboard.
4. Did you find the correct order that Dina used in constructing her different card houses?
5. Read it to a peer.

Game 9: Story Timeline

1. Read the cards for the ten story titles of the stories from level -22 on Cycles.
2. Put each story in its correct sequence as you have read it in this level of your basal.
3. Read the stories titles orally to a peer.
4. Did you place all ten of the cycle stories in the correct sequence?

Game 10: The Inside Story of The Egg

1. Read the sentence cards.
2. Place the letter of the picture (A,B,C,D) in order that you know the events had to happen in the development stages of a chick inside an egg
3. If you play correctly, you will be a winner in showing the main stages in the development of a chick inside an egg.

*Source for Games:

"Rhymes and Reasons" (Level 19-24) Macmillan Basal Series, 1983.